

A Snapshot of Colorectal Cancer

Incidence and Mortality

[Colorectal cancer](#) is the third most common cancer and the third leading cause of cancer-related [mortality](#) in men and in women in the United States. Over the past decade, colorectal cancer [incidence](#) and mortality rates have decreased in all racial/ethnic populations. Men and women have similar incidence and mortality rates through age 50; after age 50, rates are higher in men.

Differences exist between racial and ethnic groups in both incidence and mortality. African Americans have higher incidence and mortality rates than other racial/ethnic groups, while incidence and mortality rates are lowest among Hispanics and Asians/Pacific Islanders. The overall colorectal cancer incidence and mortality rates have been declining over the past two decades; these declines largely have been attributed to increased use of [screening](#) tests.

Risk factors for colorectal cancer include increasing age, colorectal [polyps](#), a family history of colorectal cancer, and certain genetic mutations. Effective colorectal cancer screening tests include [fecal occult blood test](#), [sigmoidoscopy](#), and [colonoscopy](#). These screening tests enable detection and removal of polyps that may progress to cancer. Standard treatments include surgery, [chemotherapy](#), [radiation therapy](#), and [targeted therapy](#).

It is estimated that approximately \$14.1 billion¹ is spent in the United States each year on colorectal cancer treatment.

Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at the [SEER](#) Web site.

¹ [Cancer Trends Progress Report](#), in 2010 dollars.

Trends in NCI Funding for Colorectal Cancer Research

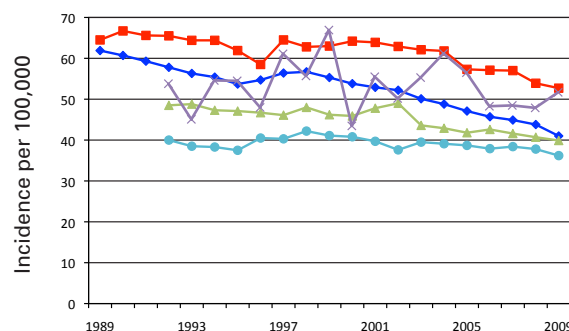
The National Cancer Institute's (NCI) investment² in [colorectal cancer research](#) increased from \$258.4 million in fiscal year (FY) 2007 to \$265.1 million in FY 2011. In addition to this funding, NCI supported \$58.6 million in colorectal cancer research in FY 2009 and 2010 using funding from the American Recovery and Reinvestment Act (ARRA).³

Source: NCI [Office of Budget and Finance](#).

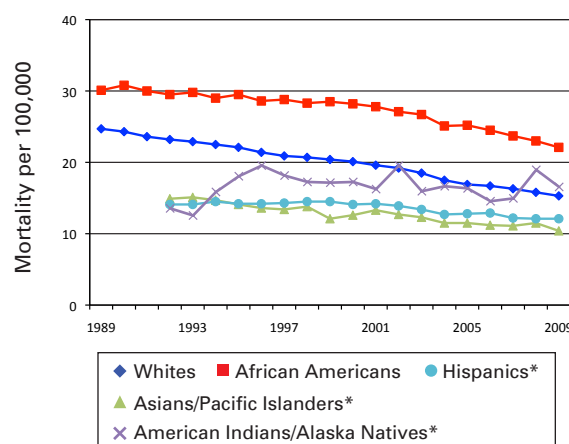
² The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see [About NIH](#).

³ For more information regarding ARRA funding at NCI, see [Recovery Act Funding at NCI](#).

U.S. Colorectal Cancer Incidence

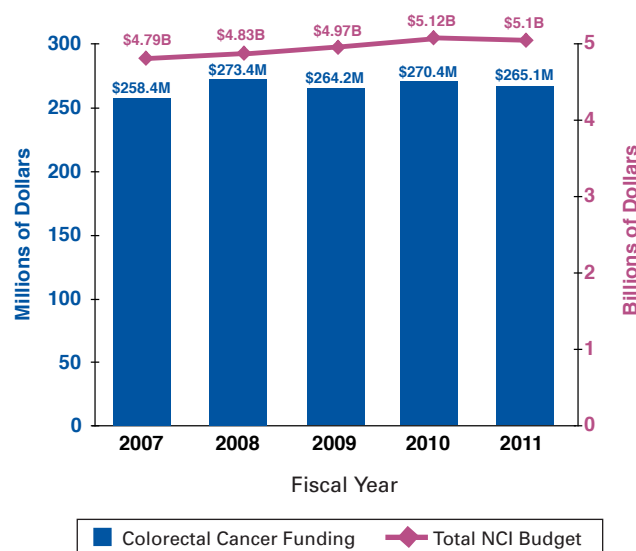


U.S. Colorectal Cancer Mortality



* Incidence and mortality data not available before 1992.

NCI Colorectal Cancer Research Investment



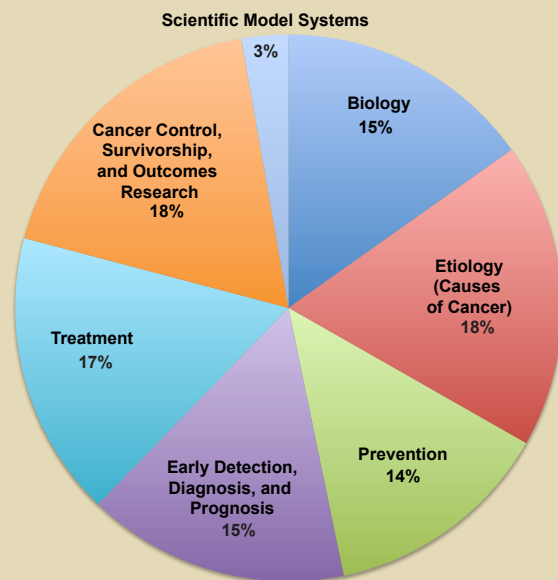
Examples of NCI Activities Relevant to Colorectal Cancer

- NCI's [Transdisciplinary Research on Energetics and Cancer](#) initiative supports studies on the biology, [genomics](#), and genetics of energy balance and on behavioral, sociocultural, and environmental factors that influence cancer risk, including one clinical trial that is examining whether exercise and/or [metformin](#) can reduce levels of fasting insulin in colorectal cancer survivors.
- The [Prostate, Lung, Colorectal, and Ovarian \(PLCO\) Cancer Screening Trial](#), a large-scale clinical trial, is determining whether specific cancer-screening tests, including flexible sigmoidoscopy for colorectal cancer screening, reduce deaths from these cancers. Results showed that screening with flexible sigmoidoscopy was associated with a decrease in both incidence and mortality of colorectal cancer.
- The [Colorectal Cancer Risk Assessment Tool](#) helps health providers assess a person's risk of developing colorectal cancer.
- NCI's [Population-based Research Optimizing Screening through Personalized Regimens \(PROSPR\)](#) program supports multisite, coordinated transdisciplinary research on cancer screening to better understand how to improve the screening process, including recruitment, diagnosis, and referral for treatment. Three sites are focused on colorectal cancer screening.
- NCI's [Cancer Imaging Program](#) supports The Cancer Imaging Archive—a large collection of medical images of cancer, including [CT colonography](#) images.
- Seven gastrointestinal-cancer-specific [Specialized Programs of Research Excellence \(SPOREs\)](#), two focused on colorectal cancer, are conducting translational research on the gastrointestinal system.

Additional Resources for Colorectal Cancer

- The [What You Need To Know About™ Cancer of the Colon and Rectum](#) booklet provides information on possible risk factors, screening, symptoms, diagnosis, and treatment. Information specialists also can answer questions about cancer at 1-800-4-CANCER.
- The NCI [Colon and Rectal Cancer Home Page](#) provides up-to-date information on colorectal cancer treatment, prevention, genetics, causes, screening, testing, and related topics.
- The [Colorectal Cancer Screening Fact Sheet](#) provides information about colorectal cancer risks and screening tests.
- Information on treatment options for [colon cancer](#) and [rectal cancer](#) is available from PDQ, NCI's comprehensive cancer database.
- **Clinical trials for [colon](#) and [rectal](#) cancer** can be found in NCI's list of clinical trials.

NCI Colorectal Cancer Research Portfolio



Percentage of Total Dollars by Scientific Area
Fiscal Year 2011

Data source: NCI Funded Research Portfolio. Only projects with assigned [scientific area codes](#) are included. A description of relevant research projects can be found on the [NCI Funded Research Portfolio](#) Web site.

Selected Advances in Colorectal Cancer Research

- A study revealed that [racial and ethnic disparities in colorectal screening persist](#) among Medicare recipients, despite expansion of coverage for screening. Published May 2011.
- Researchers identified [genetic variants of inflammatory mediators associated with increased risk of colon cancer among African Americans](#). Published January 2012.
- [Gene expression profiling](#) identified a [marker of intestinal stem cells that functions as a tumor suppressor](#). Published March 2012.
- Results from the PLCO trial showed that [screening with flexible sigmoidoscopy was associated with a decrease in colorectal cancer](#) incidence (in both the [distal](#) and [proximal](#) colon) and mortality (in the distal colon only). Published May 2012.
- Click [here](#) to access selected free full-text journal articles on advances in NCI-supported research relevant to colorectal cancer. Click [here](#) to search for additional scientific articles or to complete a [search tutorial](#) on PubMed.